Straight to Implementation (STI) guidance

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STI is a strategy that uses Ecology's nonpoint authority to clean up a watershed. It is an appropriate strategy to use in watersheds where we know the pollution problem is caused by nonpoint sources and we know the specific actions necessary to eliminate that pollution.

If STI is successful, the impaired waters will be cleaned up and moved from Category 5 to Category 1 of the Water Quality Assessment without having to develop a TMDL. While the STI project is being implemented, the affected water bodies will remain in Category 5. If they do not move to Category 1 at the end of the project, Ecology will be required to do a TMDL.

STI projects are intended to implement nonpoint source controls as quickly as possible. When we use STI, compliance is to be achieved no more than 10 years after the start of STI work in the watershed. The only exception to this time requirement is for pollutants such as temperature, which might take longer because of the time it takes for trees to grow and supply shade; however, even in this case, all implementation actions necessary to achieve compliance must be completed within 10 years.

Is My Watershed a Good Candidate for STI?

STI is only appropriate for simple watersheds with few inputs. As a result, STI is most suited for rural watersheds with few contributers. All potential STI projects should be evaluated up front by the Watershed Planning Unit at headquarters and if needed, an EAP technical staff person, who will determine whether the pollution assumptions are appropriate and if the project is indeed a good candidate for STI.

We may use STI when specific criteria are met:

1. We have identified the project as appropriate for STI through the annual strategy soirees.
2. We know the pollution control strategies necessary to solve the pollution problems in the watershed. The strategies are well-known and have been demonstrated to work effectively to eliminate the sources of pollution that have been identified in the watershed AND have been designated as Ecology-approved practices to control pollution from the identified land use.
3. A straight to implementation work plan has been drafted, gone through the WQ program review process, and approved as complete. (Program review process is same as TMDL review process except that there is no EAP technical review.)
4. An Ecology staff person has been designated as responsible for implementing the STI project, writing the internal staff workplan, directing the implementation efforts, doing reporting required by the settlement agreement, and ensuring that the project is completed. Ideally, STI responsibilities and individual milestones should be part of the staff person's annual workplan. To the extent possible, we should direct grant and loan funds to help with implementation, however, use of STI should not depend on having Ecology funds for every needed action.
5. STI may only be used to address nonpoint pollution sources. STI may be used in watersheds in which the following conditions are met:
   A. The watershed contains only nonpoint sources of pollution.
   B. The watershed contains nonpoint sources and point sources covered by general permits for which Ecology makes a finding that individual permits are not required.
   C. The watershed contains nonpoint sources and point sources with individual permits and Ecology makes a finding that the individual permit holders in the watershed do not discharge the pollutant that will be addressed by STI.
   D. The watershed meets the conditions of both B. and C., above.

E. If individual permit holders do discharge the pollutant that STI will address, they are implementing advanced waste treatment and control techniques for that pollutant that reasonably represent the state-of-the-art or are subject to a compliance schedule with the same effect.
F. No new point sources that would discharge the pollutant being addressed by STI are anticipated in the watershed.
G. If a dam is present in the watershed, Ecology has made a determination that the dam is not contributing to the pollution problem.

STI internal staff workplan

Each STI project must have an internal STI work plan approved and in place prior to beginning the project. If an Ecology BMP manual exists for pollutants and land uses being addressed in the STI project, the manual must be followed, and must be referenced in the plan. A STI work plan does not have to be lengthy, but it must include the following elements.

1. **Identification of the watershed, the polluted segments, and the pollutants to be addressed by the work plan.**
In addition to a list of segments, the plan must include a map of the watershed in which the STI project will be implemented. The map must show the impairments that will be addressed.

2. **Identification of the causes and sources of pollution in the watershed.**
In this section of the work plan, you must identify all of the land uses in the watershed and show them on a map. For the land uses that you have determined are not contributing pollution to the watershed, explain how you know they are not part of the problem. The goal of this discussion is to document that you have fully considered all possible sources of pollution and eliminated them as possibilities.

Then move on to the land uses that are causing the problem. To develop this section of the work plan, start by answering the following questions:
o Which land uses are contributing pollution?
o Why are the land uses contributing pollution to the watershed—poor location of the land use itself or of components of the use (for instance, an animal feeding area too close to surface water), lack of BMPs, failing infrastructure, insufficient maintenance, other? Describe the problems in detail so it's clear that you know what it is and how to fix it. For example, there are
  - X number of livestock operations that do not have BMPs, and need BMPs installed and or maintained, including a rough estimate of the number of animals per operation.
  - Y acres of row crops needing improved nutrient management or sediment control.
  - Z linear miles of eroded streambank needing restoration.
  - Q number of failing septic systems needing repair or connection to sewer.
o Are some areas in the watershed worse than others?
Evidence of the pollution problems should be documented in photographs.

3. **A description of the nonpoint source management measures that will be implemented to achieve load reductions, and a description of the critical areas in which those measures will be needed.**
This section describes the specific BMPs that will be used to fix the problems described in # 2, above. This section should include a map showing where the implementation actions will take place.
o The plan must specify the "Full suites" of BMPs that are necessary to eliminate the pollution problem. There may be more than one such suite for different types of lands in the watershed (e.g. based on land use, soils, gradient, etc.).

- If the BMPs must be applied in a specific sequence, the plan must specify the sequence of implementation (for example, exclusion fence must be installed prior to or at the same time as an off-stream watering facility).
- Ecology will specify buffer widths associated with any given BMP and specific distances from surface water for BMP placement.

4. **An estimate of the load reductions expected from management measures.**
In general, our objective will be to eliminate pollution from all of the identified sources, not just from enough of them to achieve compliance with water quality standards. The load reductions estimated must at least be enough to achieve compliance. To estimate expected load reductions, you may use Step L or some other logical method. Estimates should be at the same scale as the actions outlined, for example, the load reduction expected from BMPs installed and/or maintained at ALL livestock operations; expected load reductions from ALL streambank restoration. In the absence of a load reduction estimate, state that the goal is to eliminate all anthropogenic pollutant loading to the waterbody.

5. **An estimate of the amounts of technical and financial assistance needed, associated costs, the sources and authorities, and a strategy for implementing the work plan.**
In this section of the plan, you may not simply say that we will implement as funding allows. You must develop a strategy that describes how we will use all the tools we have, including enforcement, to get the water clean. To start, identify the agencies and groups that can help implement the management measures, estimate the amount of technical and financial assistance necessary, and identify the state and local laws that can be used to require implementation. However, it isn't enough to just identify these things. Once identified, you must lay out a strategy to work with the appropriate groups to get funding, get assistance, and use legal mechanisms to get the work done.

The strategy must specify how long we will try an approach and when we will move to enforcement if we don't get adequate results. For instance:

- For *agricultural BMPs*, either installation or maintenance, will the conservation district or local planning department help? If so, sit down with them and figure out a strategy to solve the problem. If not, figure out how to proceed on our own.
- For *failed infrastructure*, such as failing septic systems, will the local health district or local government help? The health district could require repairs; local government could require connection to sewer. If money is an option, try to work with them to identify specific properties causing problems and help with local loan fund application. Try to get health district or local government to take enforcement action. If none of this works, discuss with headquarters and develop a strategy to move forward on our own.
- For *uses that are poorly located*, work with the local planning department to see whether they can help. We may be able to get the use designated as "nonconforming," which is the first step to getting it moved or abolished, although it's a long road. You're more likely to succeed with things like moving parking lots out of riparian areas, than with moving peoples' houses.
- For *other problems identified*, think of an agency or group that could help us,

BUT if there isn't one, then we have to come up with a strategy to move ahead on our own. We're not done until the water is clean.

6. **An information and education component.**
This section should describe how we will get information to people about watershed problems and solutions, where they can go to get help with implementation, etc.

7. **A schedule for implementing the nonpoint measures identified in the work plan that ensures compliance will be achieved** within 10 years of start of STI work in the watershed, or for pollutants

such as temperature where compliance will take longer because of natural processes such as tree growth, all implementation actions will be completed within 10 years. To ensure Ecology meets the 10-year deadline, each STI project is required to have a 3-year and a 7-year progress review to determine whether implementation is proceeding on schedule and to implement use of further measures if it is not.
These progress reviews should be written into the STI work plan. The 3-year and 7-year compliance reviews evaluate the extent to which BMPs have been implemented. The work plan should also include receiving water monitoring at about year 5 to determine progress towards achieving water quality standards (see #10).

8. **A description of interim, measureable milestones for determining whether management measures are being implemented; milestones will be set at 2-year intervals to simplify possible placement in Category 4b.**
This section must describe interim, measureable milestones for determining whether management measures are being implemented and whether they are being implemented on the time schedule described in #7. Some examples might be:
   - A percentage of the manure lagoons that must be installed and operating by a certain date
   - A subwatershed in which all management measures are implemented by a certain date
   - A proportion of the failing septic systems that must be fixed by a certain date

9. **A set of criteria that can be used to determine whether load reductions are being achieved over time and substantial progress is being made toward attaining water quality standards.**

10. **A monitoring component to evaluate the effectiveness of the implementation efforts over time, including identification of the types of monitoring, the parties responsible for conducting the monitoring, a reporting schedule for results, and a schedule for monitoring. Effectiveness Monitoring will be completed as described in the manual "Effectiveness Monitoring Guidance."**
We should work with EAP to design a monitoring strategy, and we should not perform any monitoring until enough implementation has been done and enough time has passed that it is logical to expect that we would see a difference in water quality. We might also consider other measurements of stream health , such as stream width to depth ratios, presence of macroinvertebrates, etc. EAP can help you determine whether your project needs baseline effectiveness monitoring prior to BMP implementation.

When does a STI project count toward meeting our TMDL settlement agreement obligations?

Straight to Implementation is about doing, not about planning. Therefore, although each STI will be guided by a staff work plan, it is not a "STI project" until actual pollution control work starts on the ground. To count toward meeting Ecology's obligations under the TMDL settlement agreement, substantial implementation must have begun. This demonstrates to the TMDL litigants and EPA that Ecology has made a commitment to complete BMP installation in the watershed and that implementation is actually occurring, so there is a reasonable expectation that water quality standards will be met.

To show substantial implementation of STI, Ecology must demonstrate the following–

1. Dedicated Ecology staff person has been assigned to implement the STI project.
For example, this could be a single person who is responsible for implementation of nonpoint source controls, or a group of Ecology inspectors who will work throughout the watershed.

2. Project has been launched in the watershed–for example:
   - Public outreach activity completed, which could include but are not limited to:

- public meetings,
- mailing of outreach materials to watershed residents,
- phone calls to watershed residents, and
- announcements in newspapers or through some other information network.

- If partner agencies will help with implementation, an agreement has been established stipulating that they will use the suites of BMPs, including the specific buffer widths and BMP placement measurements that Ecology has prescribed.

3. BMP installation has begun, which means:
   - Full suites of BMPs have been installed on 25 percent of properties;
   - The first BMP on the sequenced list of BMPs for the watershed is being implemented throughout the watershed (e.g., when using a WCC crew for exclusion fence installation, that installation is considered begun once the contract for installation has been signed); or
   - Ecology is implementing a systematic inspection project in the watershed that includes:
     - ✓ One or more Ecology inspectors have been assigned to identify water quality problems in a watershed following the STI internal workplan.
     - ✓ The inspectors are using Ecology's standard inspection form and are specifying the full suites of BMPs necessary to address the identified water quality problems.
     - ✓ Ecology's workplan includes using follow-up enforcement to achieve compliance when necessary.
     - ✓ Twenty-five percent of properties have been inspected, with property owners having been informed of the suite of BMPs needed.

Once a STI project has reached the substantial implementation threshold, the STI implementation lead staff person should fill out the STI checklist, which is on the following page, and send it to the Watershed Planning Unit at headquarters. Staff in that unit will verify that the checklist items have been completed and will send the checklist to EPA. Listings will count when EPA acknowledges receipt of the checklist.

STI Checklist

Name of watershed where STI will be used_____

1. Dedicated staff person has been assigned to the project. Yes_____ No_____

2. STI project work plan is complete and has been through internal review process.

   Yes_____ No_____

3. Project has been launched in the watershed. Yes_____ No_____

   Launch must include one of the bulleted items from #3 of the instructions or must use some other strategy that is equivalent. Briefly describe how the project was launched.

4. BMP installation has begun. Yes_____ No_____

   This must include one of the three bulleted items from #4 of the instructions. Briefly describe which item has been completed.